

IN THE CLAIMS:

Please amend the claims as shown

1. (currently amended) ~~Printing process with~~ In a printing process having a pre-printing printing stage in which digital master image data are provided which represent an original master, digital printing data for the printing colors involved in the printing are produced from the master image data and the digital printing data are transmitted to a print shop by way of a data channel for production in the print shop of printing plates by way of the digital printing data, and an edition printing stage in which edition printing is carried out by way of these printing plates in a printing machine, the improvement comprising the steps of producing test image data representing a test image by image wise colorimetric measurement of ~~one or more~~ at least one edition printing ~~specimen sample~~ by way of a color measurement; transmitting the test image data produced in the print shop to the pre-printing stage through a data channel, evaluating the test image data in the pre-printing stage for quality monitoring; transmitting a result of the quality monitoring to the print shop through a data channel; and using in the print shop the result of the quality monitoring transmitted from the pre-printing stage for at least one of the release of the edition printing and the control of the printing process.
2. (currently amended) Process according to claim 1, ~~wherein~~ 21 which comprises determining and then transmitting in the pre-printing stage measurement positions and nominal color values at these measurement positions ~~are determined and transmitted through the~~ a data channel to the print shop, ~~whereby and using~~ the nominal color values ~~are used~~ in the print shop for the color control of the printing machine.

3. (currently amended) Process according to claim 1, ~~wherein~~ 21 which comprises using a spectrally operating color measurement system ~~is used~~ for the image wise colorimetric measurement of the edition printing ~~specimen~~ sample and wherein the test image data transmitted to the pre-printing stage are spectral data which include for each measured image point remission values for several, different wave lengths.
4. (original) Process according to claim 3, wherein the wave lengths are 16 wave lengths in the range of 400 to 700nm with a respective spacing of 20nm.
5. (currently amended) Process according to claim 1, ~~wherein~~ 21 which comprises calculating a test image ~~is calculated~~ on the basis of the test image data transferred to the pre-printing stage and visually ~~displayed~~ displaying the test image on a screen and visually comprising ~~wherein the~~ quality monitoring ~~includes a visual comparison~~ of the displayed test image with a reference image for the quality monitoring.
6. (currently amended) Process according to claim 1, ~~wherein~~ 21 which comprises including in the quality monitoring ~~includes~~ a monitoring of color deviations between the nominal color values and the corresponding color measurement values contained in the test image data.
7. (currently amended) Process according to claim 1, ~~wherein~~ 21 which comprises producing digital test print data ~~are produced~~ from the test image data transferred to the pre-printing stage, producing a physical test print ~~is produced~~ by way of these digital test print data, and wherein the quality monitoring includes a visual comparison of this test print with a reference image.

8. (currently amended) Process according to claim 7, wherein the reference image is a test print or trial print produced in the pre-printing stage ~~by way of using~~ the digital printing data.
9. (currently amended) Process according to claim ~~1~~, wherein 21, which comprises transmitting the release for the edition printing ~~is transmitted to the print shop as a result of~~ based on the quality monitoring conducted in the pre-printing stage.
10. (currently amended) Process according to claim ~~1~~, wherein ~~as a result~~ 21 which comprises transmitting the results of the quality monitoring conducted in the pre-printing stage ~~because of~~ based on a desired color change or new or modified nominal color values ~~are transmitted to the print shop.~~
11. (currently amended) Process according to claim ~~1~~, wherein ~~as a result~~ 21 which comprises transmitting the results of the quality monitoring conducted in the pre-printing stage ~~because of~~ based on a desired color change, new or modified layer thickness values or concentration values for the colors involved in the printing ~~are transmitted to the print shop.~~
12. (currently amended) Process according to claim ~~1~~, wherein ~~as a result~~ which comprises transmitting the results of the quality monitoring conducted in the pre-printing stage ~~because of~~ based on a desired color change, new or modified nominal spectra or ~~recipes~~ formulations for the colors involved in the printing ~~are transmitted to the print shop.~~

13. (currently amended) Process according to claim 1, ~~wherein as a result~~ 21 which comprises transmitting the results of the quality monitoring conducted in the pre-printing stage ~~because of~~ based on a desired color change or new or modified digital printing data ~~are produced and transmitted to the print shop for use in the production of new printing plates in the print shop on the basis of~~ based on the digital print data, and ~~use~~ using of the printing plates for the edition printing.
14. (currently amended) Process according to claim ~~1~~ 21, wherein the quality monitoring in the pre-printing stage includes a protocolling of the print quality of the edition printing.
15. (currently amended) Process according to claim 1, ~~wherein~~ 21 which comprises using the original master or a screen display thereof ~~is used as reference image for the visual comparison with the test image.~~
16. (currently amended) Process according to claim 1, ~~wherein~~ 21 which comprises using a test print or trial print printed ~~by way of~~ utilizing the digital printing data ~~and which is binding for the quality, or a screen display thereof, is used as reference image for the visual comparison with the test image.~~
17. (currently amended) Process according to ~~claim 1, wherein~~ 21 which comprises using a screen display of a virtual test print calculated from the digital printing data and binding for the quality ~~is used as reference image for the visual comparison with the test image.~~

18. (currently amended) Process according to ~~claim 1, wherein~~ 21 which comprises calculating a virtual test print ~~is calculated~~ in the print shop from the digital printing data transmitted from the pre-printing stage and ~~displayed~~ displaying the visual test print on a screen, and using the ~~wherein~~ this virtual test print is used for the visual comparison with the test image captured in the print shop or directly with a trial print ~~specimen~~ sample.
19. (currently amended) Process according to ~~claim 1, wherein~~ 21 which comprises image wise measuring in the pre-printing stage the original master or a test print binding for ~~the quality evaluation, using a~~ is image wise measured by way of a preferably spectral color measurement system, producing a screen display of the original master or the test print ~~is produced~~ from the image data obtained thereby, and using the screen display ~~is used~~ as a reference image for the comparison with the test image.
20. (currently amended) Process according to ~~claim 1, wherein~~ 21, wherein the color measurement system of the print shop and the color measurement system in the pre-printing stage are equipped with a goniometric measurement geometry which allows illumination in different directions for the image capture.
21. (New) A printing process involving two stages, a preprinting stage and an edition printing stage which comprises in the preprinting stage producing digital original image data which represent an original master; producing digital printing data from the master image for the printing colors involved in the printing; transmitting the digital printing data to a print shop by way of a data channel; producing printing plates in the print shop using the digital printing data for use in the edition printing to be carried

out in a printing machine; using for the color control of the printing machine test image data corresponding to a test image produced by an image wise colorimetric measurement of at least one edition printing sample using a spectral color measurement system; transmitting the test image data thus produced in the print shop to the pre-printing stage through a data channel; evaluating the test image data in the preprinting stage for quality monitoring; transmitting the results of the quality monitoring from the preprinting stage to the printing shop through a data channel; and using in the printing shop the results of the quality monitoring transmitted from the preprinting stage for at least one of the release of the edition printing and the control of the printing process.